Appl. No. 10/565,331 Amdt. dated January 28, 2008 Reply to Office Action dated December 28, 2008

## Listing of Claims:

- 1 1. (Original) A compound having the formula:
- 2 Ab—<u>G</u>-L—T
- 3 wherein
- 4 Ab is an antibody;
- G is an intact glycosyl linking group covalently joining Ab to L;
- 6 L is a bond or a spacer moiety covalently joining G to T; and
- 7 T is a toxin.
- 1 2. (Original) The compound according to claim 1, wherein said linker moiety is a member
- 2 selected from substituted or unsubstituted alkyl, substituted or unsubstituted heteroalkyl and
- 3 substituted or unsubstituted aryl moieties.
- 1 3. (Original) The compound according to claim 2, wherein said linker moiety comprises a
- 2 poly(ethylene glycol) moiety.
- 1 4. (Original) The compound according to claim 1, wherein L has the formula:
- 2 {---L<sup>1</sup>--A-L<sup>2</sup>-{
- 3 wherein
- 4 L<sup>1</sup> is a bond or a linker moiety covalently joining S to A;
- A is an amplifier moiety; and
- 6 L<sup>2</sup> is a bond or a spacer moiety covalently adjoining A to T.
- 1 5. (Original) The compound according to claim 4, wherein said amplifier moiety is a
- 2 polyamine moiety.
- 1 6. (Original) The compound according to claim 5, wherein said polyamine moiety is a
- 2 dendrimer.
- 1 7. (Original) The compound according to claim 4, having the formula:
- 2 Ab-G---(PEG)<sub>m</sub>-(toxin)<sub>n</sub>

wherein

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4 PEG is a straight- or branched-chain poly(ethylene glycol); 5 m is an integer from 1 to 6; and 6 n is an integer from 1 to 1,000. 1 8. (Original) The compound according to claim 4, having the formula: Ab-G-L<sup>1</sup>-(dendrimer)<sub>m</sub>-(L<sup>2</sup>-toxin)<sub>n</sub> 2 3 wherein 4 m is an integer from 1 to 6; and 5 n is an integer from 1 to 1,000. 9. 1 (Original) The compound according to claim 4, having the formula:  $Ab-G-(L^1)_m-(toxin)_n$ 2 wherein 3 4 m is an integer from 1 to 6; and 5 n is an integer from 1 to 1,000. 1 10. (Original) The compound according to claim 1, having the formula:  $Ab-G-X^1-PEG-X^2-A-X^3-(CH_2)_a-Z-(CH_2)_b-X^4-T$ 2 3 wherein X<sup>1</sup>, X<sup>2</sup> and X<sup>4</sup> are linking groups and are members selected from the group 4 5 consisting of O, S, NH, (CH<sub>2</sub>)<sub>q</sub>-NH, NH-(CH<sub>2</sub>)<sub>q</sub>, NH-C(O)-O, O-C(O)-NH,  $(CH_2)_q-NH-C(O)-O$ ,  $O-C(O)-NH-(CH_2)_q$ , C(O)-O, O-C(O), 6 (CH<sub>2</sub>)<sub>q</sub>-NH-C(O), C(O)-NH-(CH<sub>2</sub>)<sub>q</sub>, NH-C(S), and C(S)-NH 7 8 and wherein 9 A is an amplifier moiety; 10 Z is a bond cleaved by a metabolic/physiological process; 11 n is an integer from 1 to 1,000; 12 a is an integer from 1 to 10;

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b is an integer from 1 to 10; and q is and integer from 0 to 20.

1 11. (Original) The compound according to claim 1, having the formula:

3 wherein

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at least one of  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ , is:

$$-X^{1}$$
 C  $-X^{2}$  (CH<sub>2</sub>CH<sub>2</sub>O),  $-CH_{2}CH_{2}$   $-X^{3}$   $-T$ 

6 wherein

7 r is an integer from 1 to 2,500;

8 Z<sup>1</sup> is selected from the group consisting of O, S, and NH;

 $Z^2$  is selected from the group consisting of NH, and NH-(CH<sub>2</sub>)<sub>q</sub>;

10 and

 $X^1$ ,  $X^2$  and  $X^3$  are linking groups and are members selected from the group

consisting of O, S, NH, (CH<sub>2</sub>)<sub>q</sub>-NH, NH-(CH<sub>2</sub>)<sub>q</sub>, NH-C(O)-O,

O-C(O)-NH,  $(CH_2)_q$ -NH-C(O)-O, O-C(O)-NH- $(CH_2)_q$ , C(O)-O, O-C(O),

14 (CH<sub>2</sub>)<sub>q</sub>-NH-C(O), C(O)-NH-(CH<sub>2</sub>)<sub>q</sub>, NH-C(S), and C(S)-NH

15 wherein

n is an integer from 1 to 1,000; and

q is an integer from 0 to 20.

12. (Original) The compound according to claim 1, having the formula:

$$Ab-G-X^{1}-PEG-X^{2}-A\left(NH\right)^{O}S \cdot S \cdot S \cdot X^{4-T} \cdot NH$$

3 wherein

X<sup>1</sup>, X<sup>2</sup> and X<sup>4</sup> are linking groups and are members selected from the group

consisting of O, S, NH, (CH<sub>2</sub>)<sub>q</sub>-NH, NH-(CH<sub>2</sub>)<sub>q</sub>, NH-C(O)-O,

O-C(O)-NH, (CH<sub>2</sub>)<sub>q</sub>-NH-C(O)-O, O-C(O)-NH-(CH<sub>2</sub>)<sub>q</sub>, C(O)-O, O-C(O),

(CH<sub>2</sub>)<sub>q</sub>-NH-C(O), C(O)-NH-(CH<sub>2</sub>)<sub>q</sub>, NH-C(S), and C(S)-NH

wherein

n is an integer from 1 to 1,000; and

q is an integer from 0 to 20.

1 13. (Original) The compound according to claim 12, having the formula:

14. (Original) A compound having the formula:

- 2 S-L-T
- 3 wherein

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- 4 S is a nucleotide sugar
- 5 L is a bond or a spacer moiety covalently joining S to T; and
- 6 T is a toxin moiety.
- 1 15. (Original) The compound according to claim 14, wherein said spacer moiety is a
- 2 member selected from substituted or unsubstituted alkyl, substituted or unsubstituted heteroalkyl
- 3 and substituted or unsubstituted aryl moieties.
- 1 16. (Original) The compound according to claim 15, wherein said spacer moiety comprises a
- 2 poly(ethylene glycol) moiety.
- 1 17. (Original) The compound according to claim 14, wherein L has the formula:
- 3 wherein
- 4 L<sup>1</sup> is a bond or a spacer moiety covalently joining S to A;

5 A is an amplifier moiety; and

6 L<sup>2</sup> is a bond or a spacer moiety covalently joining A to T.

- 1 18. (Original) The compound according to claim 17, wherein said amplifier moiety is a
- 2 polyamine moiety.
- 1 19. (Original) The compound according to claim 18, wherein said polyamine moiety is a
- 2 dendrimer.
- 1 20. (Original) The compound according to claim 17, having the formula:
- 2  $S-(PEG)_m-(toxin)_n$
- 3 wherein
- 4 PEG is a straight- or branched-chain poly(ethylene glycol);
- 5 m is an integer from 1 to 6; and
- 6 n is an integer from 1 to 1,000.
- 1 21. (Original) The compound according to claim 17, having the formula:
- $S-L^1-(dendrimer)_m-(L^2-toxin)_n$
- 3 wherein
- 4 m is an integer from 1 to 6; and
- 5 n is an integer from 1 to 1,000.
- 1 22. (Original) The compound according to claim 17, having the formula:
- 2  $S-(L^1)_m-(toxin)_n$
- 3 wherein
- 4 m is an integer from 1 to 6; and
- 5 n is an integer from 1 to 1,000.
- 1 23. (Original) The compound according to claim 22, having the formula:

Sugar—
$$X^1$$
—PEG— $X^2$ ———A $\left(X^3$ —(CH<sub>2</sub>)<sub>a</sub>—Z—(CH<sub>2</sub>)<sub>b</sub>— $X^4$ —T $\right)_n$ 

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3 wherein X<sup>1</sup>, X<sup>2</sup> and X<sup>3</sup> are linking groups and are members selected from the group 4 consisting of O, S, NH(CH<sub>2</sub>)<sub>q</sub>-NH, NH-(CH<sub>2</sub>)<sub>q</sub>, NH-C(O)-O, O-C(O)-NH, 5  $(CH_2)_q$ -NH-C(O)-O, O-C(O)-NH-(CH<sub>2</sub>)<sub>q</sub>, C(O)-O, O-C(O), 6 (CH<sub>2</sub>)<sub>q</sub>-NH-C(O), C(O)-NH-(CH<sub>2</sub>)<sub>q</sub>, NH-C(S), and C(S)-NH 7 8 and wherein 9 A is an amplifier moiety; 10 Z is a bond cleaved by a metabolic/physiological process; n is an integer from 1 to 1,000; 11 a is an integer from 1 to 10; 12 13 b is an integer from 1 to 10; and 14 q is and integer from 0 to 20.

1 24. (Original) The compound according to claim 14, having the formula:

X<sup>1</sup>, X<sup>2</sup> and X<sup>3</sup> are linking groups and are members selected from the group consisting of O, S, NH(CH<sub>2</sub>)<sub>q</sub>-NH, NH-(CH<sub>2</sub>)<sub>q</sub>, NH-C(O)-O, O-C(O)-NH, (CH<sub>2</sub>)<sub>q</sub>-NH-C(O)-O, O-C(O)-NH-(CH<sub>2</sub>)<sub>q</sub>, C(O)-O, O-C(O), (CH<sub>2</sub>)<sub>q</sub>-NH-C(O), C(O)-NH-(CH<sub>2</sub>)<sub>q</sub>, NH-C(S), and C(S)-NH wherein

9 q is an integer from 0 to 20.

25. (Original) The compound according to claim 24, having the formula:

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